

ABSTRACT OF THE DISCLOSURE

An electric compressor has a compressor housing, a compression mechanism, an electric motor, a circuit cover and a motor drive circuit. The compression mechanism is arranged in the compressor housing for compressing fluid. The electric motor is arranged in the compressor housing for driving the compression mechanism. The circuit cover is connected to an outer surface of the compressor housing. The circuit cover and the compressor housing define an accommodating space. The motor drive circuit is arranged in the accommodating space for driving the electric motor and includes a substrate and a switching device that is mounted on the substrate on the far side relative to the circuit cover. The switching device is pressed against the compressor housing as the motor drive circuit is fastened between the compressor housing and the circuit cover in the accommodating space due to connection of the circuit cover to the compressor housing.